IN THE CLAIMS

1. (previously presented) A method of forming interconnect, comprising:
forming a dielectric layer over a substrate, the dielectric layer having trenches therein;
forming a barrier in the trenches and on a top surface of the dielectric layer;
depositing metal over the barrier; and
polishing the metal with a slurry that includes an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, dioptase, brass, fluorite, and azurite.

2. (original) The method of Claim 1, wherein the dielectric layer comprises an oxide of silicon, and the barrier is electrically conductive.

3. (original) The method of Claim 1, wherein the dielectric layer comprises a fluorinated oxide of silicon, and the barrier is selected from the group consisting of tantalum, and tantalum nitride.

4. (original) The method of Claim 1, wherein the abrasive has a Moh's hardness between approximately 3.5 and 6.

5. (original) The method of Claim 4, wherein the slurry has a pH between approximately 3.5 and 7.

6. (original) The method of Claim 4, wherein the slurry contains approximately 0.5% to 10% by weight of the abrasive.

7. (original) The method of Claim 1, wherein the slurry contains an oxidizer comprising H_2O_2.

8. (original) The method of Claim 1, wherein polishing comprises chemical mechanical polishing.

Claim 9 (cancelled)

10. (previously presented) The method of Claim 1, wherein the slurry has a pH in the range of 3.5 to 7.

11. (previously presented) A method of polishing a first film overlying a second film wherein the second film is harder than the first film, comprising:

polishing the first film with a slurry comprising an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, dioptase, brass, fluorite, and azurite.

12. (previously presented) The method of Claim 11, wherein the first film comprises copper and the second film comprises a material selected from the group consisting of tantalum and tantalum nitride.

Claim 13 (cancelled)

14. (previously presented) The method of Claim 11, wherein the abrasive comprises approximately 0.5 to 10 wt.% of the slurry.

Claims 15-23 (cancelled)

24. (previously presented) A method of forming a damascene structure, comprising:

forming trenches in an insulating layer disposed on a substrate, the trenches having a bottom surface and side surfaces;

forming a barrier layer over a top surface of the insulating layer and over the bottom and side surfaces, the barrier layer having a first hardness;

forming a layer of metal over the barrier layer; and

removing the metal layer from over the that portion of the barrier layer that overlies the top surface of the insulating layer;

wherein removing the metal layer comprises polishing the metal with a slurry having an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, dioptase, brass, fluorite, and azurite.

25. (original) The method of Claim 24, wherein the metal comprises copper, the barrier layer comprises tantalum nitride, and the dielectric layer comprises a fluorinated oxide of silicon; and further comprising removing the barrier layer by polishing with the slurry.

Claims 26 - 31 (cancelled)